

THREE NEW SPECIES OF OPLODONTHA FROM CHINA (DIPTERA, STRATIOMYIDAE)

ZHANG Ting-Ting¹, LI Zhu², ZHOU Xian¹, YANG Ding^{1*}

1. Department of Entomology, China Agricultural University, Beijing 100193, China

2. Beijing Museum of Natural History, Beijing 100050, China

Abstract The following three new species of *Oplodontha* are described: *O. dongata* Zhang, Li et Yang, sp. nov., *O. faenigra* Zhang, Li et Yang, sp. nov. and *O. sinensis* Zhang, Li et Zhou, sp. nov. A key to the species of the genus from China is presented. The types are deposited in the Entomological Museum of China Agricultural University, Beijing.

Key words Diptera, Stratiomyidae, *Oplodontha*, new species, China.

The genus *Oplodontha* Rondani is distributed in the Palearctic, Oriental and Afrotropical Regions with 20 known species (Woodley, 2001). It is characterized by the following features: head with protuberant face; eyes bare, male holoptic, female dichoptic; lower facets of male eye distinctly smaller than upper ones; antenna distinctly shorter than head; scape equal to (or longer than) pedicel, flagellum 5-segmented; proboscis well developed and geniculated; wing with discal cell rather small; veins R_{2+3} , R_4 and M_3 absent. There is only one known species, *O. viridula* (Fabricius), from China, which was redescribed by Rozkošný (1982). Three new species are added to the fauna of China here. A key to the species of the genus from China is presented. The type specimens are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

Key to species of *Oplodontha* from China

1. Antennal scape as long as pedicel 2
Antennal scape distinctly longer than pedicel 3
2. Femora yellow; halter with darkened stalk
..... *O. viridula* (Fabricius)
Femora black with yellow apex; halter with yellow stalk
..... *O. sinensis* Zhang, Li et Zhou, sp. nov.
3. Abdomen black except tergites 2-4 with a pair of yellow lateral spots; femora black with both base and apex brownish yellow to yellow; scutellum yellow apically
..... *O. faenigra* Zhang, Li et Yang, sp. nov.
Abdomen pale yellow except dorsum with a small black spot on tergite 1 and a large median black spot on tergites 3-5; femora with only apex yellow; scutellum entirely black
..... *O. elongata* Zhang, Li et Yang, sp. nov.

1 *Oplodontha faenigra* Zhang, Li et Yang, sp. nov. (Figs. 1-4)

Male. Body length 5.1 mm, wing length 3.9 mm.

Head (Fig. 1) black, but mid-lower face yellow.

Hairs on head pale; eyes with short sparse brown hairs. Antenna blackish brown, but scape brownish yellow; antennal ratio c. 1.0 0.7 2.3.

Proboscis brownish black with some pale hairs; palpus brown with some pale hairs. Head 1.5 times as high as long; contiguous portion of eyes 0.7 times as long as ocellar triangle; eye width 1.2 times distance between antenna and median ocellus, 3.6 times frons width just above antenna and 1.1 times face width at lowest point from a direct frontal view; frons width 0.3 times distance between antenna and median ocellus and 0.3 times face width at lowest point from a direct frontal view.

Thorax black. Humeri black with outer portion yellow. Scutellum (Fig. 3) black with posterior half and spines yellow. Mesopleuron with one yellow anterior spot near anterior margin, one yellow posterior spot (which is oblique and just before wing base), and brownish yellow dorsal margin; pteropleuron with posterior portion yellow which is connected with one yellow narrow oblique spot on mesopleuron. Hairs on thorax pale, but mesopleuron mostly bare anteriorly and hypopleuron wholly bare. Legs [mid tarsus and apical portion of hind tarsus broken] black, but trochanters brownish yellow; femora with base and apex brownish yellow to yellow; fore and mid tibiae brownish yellow to yellow, hind tibia with basal 2/5 and tip brownish yellow to yellow; tarsi yellow with apical portion brown. Wing (Fig. 2) hyaline. Halter yellow.

Abdomen (Fig. 4) black [partly broken apically], but tergites 2-4 with a pair of yellow lateral spots which are large on tergites 2-3, sternites 1-3 almost yellow. Hairs on abdomen pale.

Female. Unknown.

Holotype ♂, Jiangsu, Nanjing, 4 July 1986.

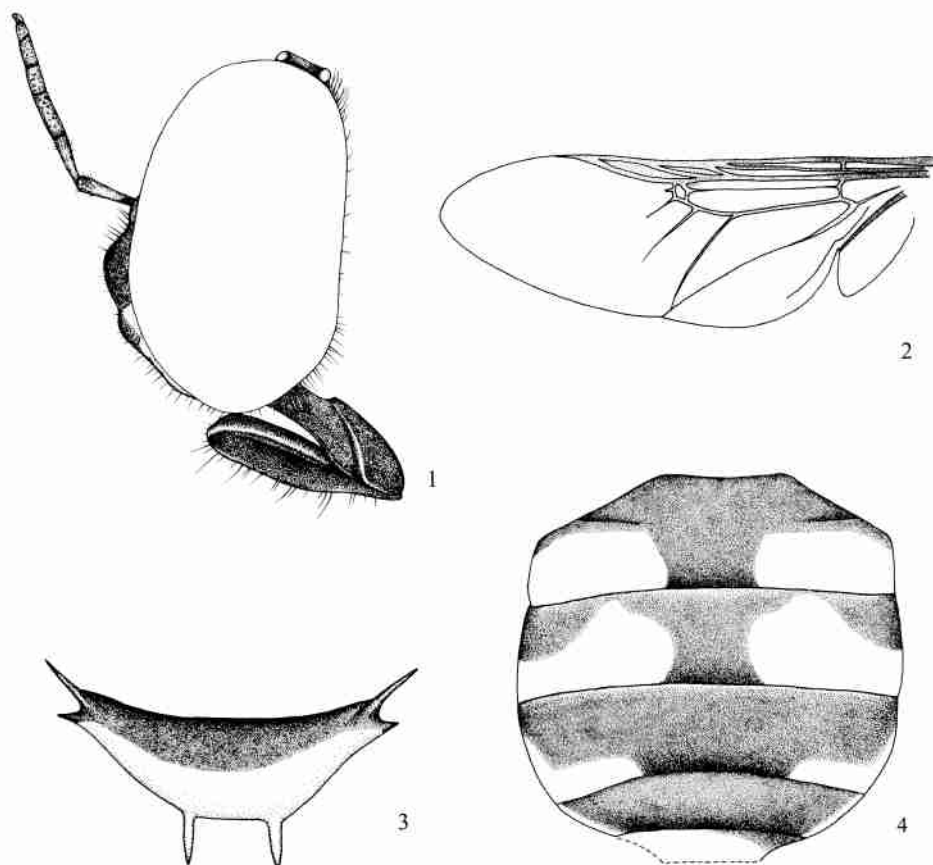
Etymology. The specific name refers to the black face.

Remarks. This new species is similar to *O. minuta* (Fabricius) from Sri Lanka and India, but it may be separated from the latter by the face (except mid-lower

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* Corresponding author; E-mail: yangding@cau.edu.cn, dyangcau@yahoo.com.cn

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Figs 1-4. *Oplodontha fainigra* Zhang, Li et Yang, sp. nov. 1. Head, lateral view. 2. Wing. 3. Scutellum, dorsal view. 4. Abdomen, dorsal view.

face) and lower sides of head black, abdomen mostly black with the yellow spots, and antenna blackish brown with the brownish yellow scape. In *O. minuta*, the face and lower sides of head are yellowish; abdomen is yellow with the black dorsal spots; antenna is brownish with the yellow scape and pedicel (according to the redescription of Brunetti 1920, 1923).

2 *Oplodontha sinensis* Zhang, Li et Zhou, sp. nov.
(Figs. 5-6)

Female. Body length 7.1-7.7 mm, wing length 7.1-7.2 mm.

Head (Fig. 5) black; lateral chitinous part of mid-lower face brownish, median protrudent part of upper face brownish. Hairs on head pale and recumbent, but denser on postocular rim. Antenna brownish yellow, except basal half of scape black and flagellomeres 4-5 brown; antennal ratio c. 1.0:1.0:3.9. Proboscis brownish black with pale hairs; palpus pale with pale hairs. Head 1.2-1.3 times as high as long; eye width 0.7 times distance from antenna to median ocellus, 0.6-0.7 times frons width just above antenna and 0.5-0.6 times face width at lowest point from a direct frontal view; frons width just above antenna 1.1-1.3 times that at median ocellus and 0.9 times face width at lowest point from a direct frontal view; distance from lowest margin of

face to antenna 1.3 times that from antenna to median ocellus; ocellar triangle 0.3 times as wide as frons at median ocellus.

Thorax black, but humeral and postalar calli brownish yellow. Hairs on thorax pale, recumbent on mesonotum and scutellum, subrecumbent on pleuron. Spines on scutellum yellow. Legs yellow, but coxae, trochanters, and femora (except for apices) black; apical portions of tarsi brown. Hairs on legs pale. Wing hyaline, but cell R₁ yellow. Halter yellow, but knob green.

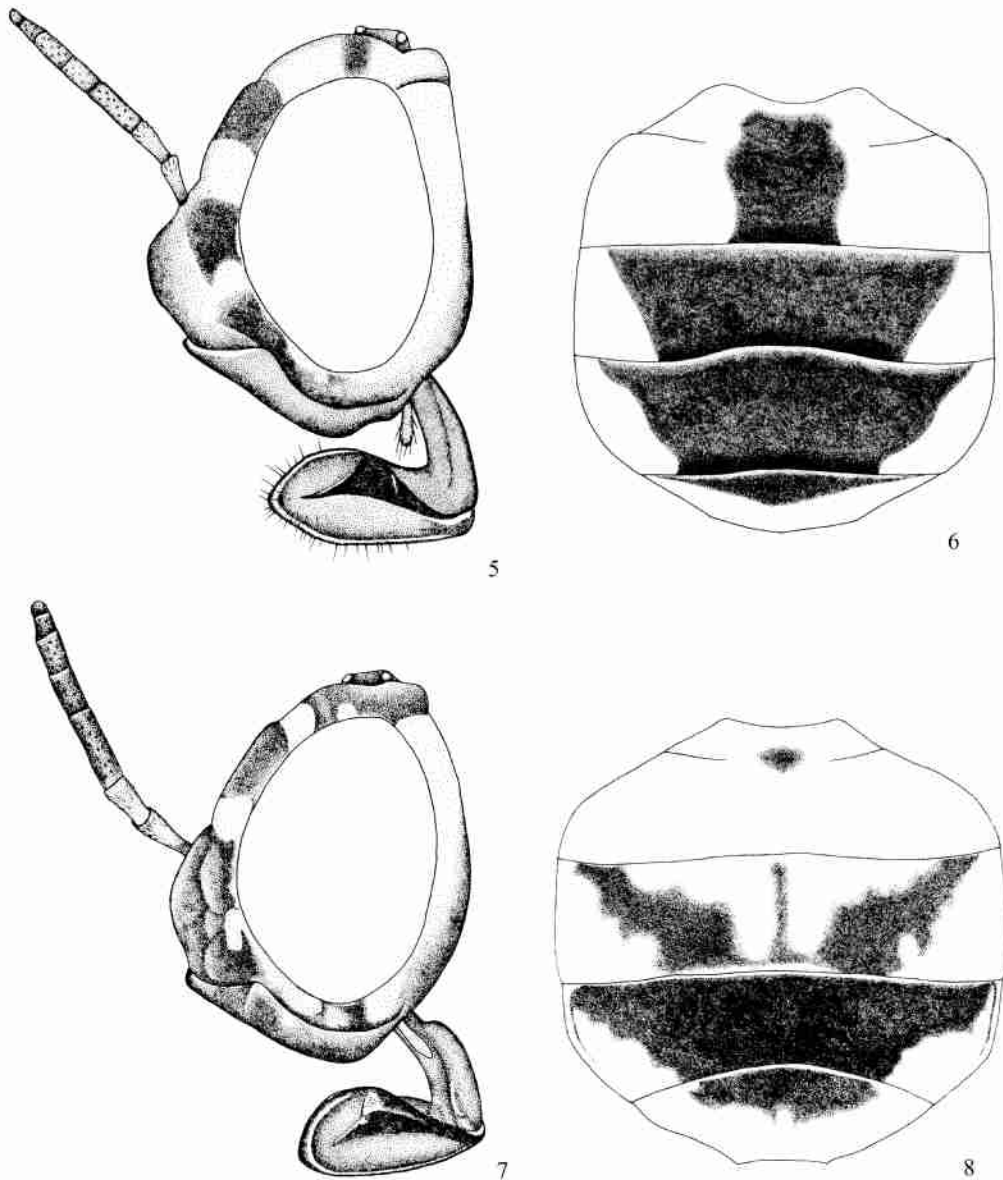
Abdomen (Fig. 6) yellowish green, but dorsum with a large median black spot which is narrow on tergites 1-2. Hairs on abdomen short and pale, but dorsum with some black hairs.

Male. Unknown.

Holotype ♀, Yunnan, Kunming, 23 June 1940. Paratypes 1 ♀, Yunnan, Kunming, 1947; 2 ♀♀, Yunnan, Chenggong, 10-12 Aug.

Etymology. The species is named after its distribution.

Remarks. The new species is somewhat similar to *O. punctifacies* (Brunetti) from Sri Lanka, but it may be separated from the latter by the femora black with the yellow apices and antenna brownish yellow except the basal half of the scape black and flagellomeres 4-5 brown.



Figs 5-6. *Oplodontha sinensis* Zhang, Li et Zhou, sp. nov. Figs 7-8 *Oplodontha dongata* Zhang, Li et Yang, sp. nov. 5, 7. Head, lateral view. 6, 8. Abdomen, dorsal view.

In *O. punctifacies*, the femora are yellow with the broad black median ring; the antenna is black with the scape and pedicel yellowish (Brunetti 1923).

3 *Oplodontha dongata* **Zhang, Li et Yang, sp. nov.**
(Figs 7-8)

Female. Body length 6.2 mm, wing length 6.2 mm.

Head (Fig. 7) black; lateral chitinous part of mid-lower face brownish, median protrudent part of upper face brownish; vertex with two reddish brown small spots behind ocellar tubercle, gena with two light reddish brown stripes below eye. Hairs on head pale and recumbent, but denser on postocular rim. Antenna brownish yellow, but basal half of scape black and flagellomeres 4-5 brown; antennal ratio *c.* 1.0: 0.7: 3.4. Proboscis brownish black with pale hairs; palpus pale

with pale hairs. Head 1.4 times as high as long; eye width 0.7 times distance from antenna to median ocellus, 0.6 times frons width just above antenna and 0.5 times face width at lowest point from a direct frontal view; frons width just above antenna 1.1 times that at median ocellus and 0.9 times face width at lowest point from a direct frontal view; distance from lowest margin of face to antenna 1.2 times that from antenna to median ocellus; ocellar triangle 0.3 times as wide as frons at median ocellus.

Thorax black, but humeral calli brownish yellow; postalar calli light brownish yellow; pteropleuron and antero-lower margin of mesopleuron yellow. Spines on scutellum yellow. Hairs on thorax pale, recumbent on mesonotum and scutellum, subrecumbent on pleuron. Legs yellow except coxae, trochanters, and femora

(except for apices) black; hind tibia with a brown narrow subbasal ring; apical portions of tarsi brownish yellow to brown. Hairs on legs pale. Wing hyaline, but cell R_1 yellow. Halter pale yellow, but base tinged with brown and knob somewhat greenish.

Abdomen (Fig. 8) pale yellow, but dorsum with a small black spot on tergite 1 and a large median black spot on tergites 3-5 which is indistinct on tergite 3. Hairs on abdomen short and pale, but dorsum with some black hairs.

Male. Unknown.

Holotype ♀, Shaanxi, Ganquan, 31 May 1971, YANG Chir Kun.

Distribution. Shaanxi.

Etymology. The specific name refers to the long stripes on the gena.

Remarks. The new species is somewhat similar to

O. minuta (Fabricius) and *O. facinagra* sp. nov., but it may be easily separated from them by the scutellum entirely black and the antenna brownish yellow except the basal half of the scape black and flagellomeres 4-5 brown. In *O. minuta* and *O. facinagra*, the scutellum is yellow apically, and the antenna is also different in colour (Brunetti, 1920, 1923).

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中国脉水虻属三新种记述 (双翅目, 水虻科)

张婷婷¹ 李 竹² 周 贤¹ 杨 定^{1*}

1. 中国农业大学昆虫学系 北京 100193

2. 北京自然历史博物馆 北京 100050

摘 要 记述我国脉水虻属 3 新种, 即长纹脉水虻 *Oplodontha elongata* Zhang, Li et Yang, sp. nov., 黑颜脉水虻 *Oplodontha facinagra* Zhang, Li et Yang, sp. nov. 和中华脉水虻 *Oplodontha sinensis* Zhang, Li et Zhou, sp. nov., 并编制分种检索表。模式标本保存在中国农业大学昆虫博物馆。

1 黑颜脉水虻, 新种 *Oplodontha facinagra* **Zhang, Li et Yang, sp. nov.** (图 1~4)

新种与 *O. minuta* (Fabricius) 近似, 但颜 (中下部除外) 和头部下边黑色, 腹部黑色且有黄斑, 触角黑褐色且柄节黄褐色。

正模 ♂, 江苏南京, 1986-07-04。

词源: 种名意指颜黑色。

2 中华脉水虻, 新种 *Oplodontha sinensis* **Zhang, Li et Zhou,**

关键词 双翅目, 水虻科, 脉水虻属, 新种, 中国。

中图分类号 Q969.44

sp. nov. (图 5~6)

新种与 *O. punctifacies* (Brunetti) 有些近似, 但腿节黑色且末端黄色, 触角黄褐色且柄节基半黑色和第 4~5 鞭节褐色。

正模 ♀, 云南昆明, 1940-06-23。副模 1 ♀, 云南昆明, 1947; 2 ♀ ♀, 云南呈贡, 8 月 10~12。

词源: 新种以分布地命名。

3 长纹脉水虻 *Oplodontha elongata* **Zhang, Li et Yang, sp. nov.** (图 7~8)

新种与 *O. minuta* (Fabricius) 和 *O. facinagra* sp. nov. 近似, 但小盾片全黑色, 触角黄褐色且柄节基半黑色和第 4~5 鞭节褐色。

正模 ♀, 陕西甘泉, 1971-05-31, 杨集昆采。

词源: 种名意指颊的长条斑纹。

* 通讯作者。